

REMARKS

Claims 1-13, 24, 26, 28, 29 and 31 are pending in this application. By this Amendment, claims 1, 28, 29 and 31 are amended. Reconsideration of the application is respectfully requested.

The Office Action rejects claims 1-13, 24, 26, 28-29 and 31 under 35 U.S.C. §103(a) over Umeda et al. (U.S. Patent No. 6,645,646). Applicants respectfully traverse this rejection.

In particular, Applicants assert that Umeda does not disclose, suggest or render obvious a magnetic recording medium that includes at least a ferromagnetic atom rich layer wherein the ferromagnetic atom rich layer is formed of a cobalt alloy containing more than 64% to not more than 83% of cobalt, as recited in independent claims 1, 28, 29 and 31.

Specifically, the Office Action admits that Umeda is silent with regard to the use of a bonding layer which contains the specified amount of cobalt. (See Office Action, page 3, lines 1-2). The Office Action asserts that it would have been obvious to determine an optimum value of cobalt or iron in the bonding layers since discovering an optimum value of a result effective variable involves only routine skill in the art. (See Office Action, page 3, lines 5-9). However, MPEP §2144.05, Chapter III clearly provides that "the law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims," and that "a particular parameter must first be recognized as a result effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum range or workable ranges of said variable might be characterized as routine experimentation."

In contrast to the claimed invention, Umeda does not disclose or suggest any significance related to increasing the exchange coupling effect. Moreover, Umeda does not disclose, suggest or recognize this exchange coupling effect which results by using, for example, the claimed specific range of cobalt as a result effective variable. Instead, Umeda

discloses three parameters that are identified as being necessary to obtain a thermally stable performance. The three parameters disclosed by Umeda are (1) increasing the magnetic anisotropy constant, (2) decreasing the temperature, and (3) increasing the grain volume of the magnetic layer. (See Col. 2, lines 58-64). As such, Umeda fails to disclose that the "particular parameter" of the specified amount of cobalt is "a result effective variable that achieves a recognized result" such as increasing the strength of the exchange coupling. Accordingly, the claimed specific range and benefit cannot be characterized as a variable that is achieved through routine experimentation.

Also, Applicants indicate that support for the amended features of claims 1, 28, 29 and 31 can be found in the specification at, for instance, page 60, lines 1-4 and Figs. 17a-17b.

Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §103(a) of claims 1-13, 24, 26, 28-29 and 31, be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-13, 24, 26, 28-29 and 31 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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